a flow path, through which a tempering medium can flow, and being defined by said cylinder base body circumference and said cylinder outer body, said circumference having a multiplex-threaded, spiral shaped conduit, said cylinder outer body conducting printing ink.

16. (New) The cylinder of claim 15 further including strips on said cylinder base body circumference, said strips supporting said cylinder outer body on said cylinder base body.

17. (New) The cylinder of claim 15 wherein said conduit is octuply-threaded.

18. (New) The cylinder of claim 15 wherein said conduit has a first cross-sectional area and further wherein said cylinder outer body has a shell surface having a second cross-sectional area and wherein a ratio of said first and second cross-sectional areas is in the range of 1:1200 to 1:1600.

19. (New) The cylinder of claim 16 wherein said strip has a first width and further wherein said cylinder outer body has a wall thickness, and wherein a ratio of said first width to said wall thickness is less than or equal to 2.

20. (New) The cylinder of claim 19 wherein said ratio of said first width to said wall thickness is less than or equal to 1.5.

21. (New) A cylinder of a rotary printing press comprising:

a cylinder base body having a circumference;

a cylinder outer body spaced from said cylinder base body and having a shell surface; and

an axially extending gap defined by said spaced cylinder base body and said cylinder outer body and through which a tempering medium can flow, said gap having a generally circular profile, said gap having a cross-section, said shell surface having a shell surface area, a ratio of said gap cross-section to said shell surface area being between 1:200 and 1:600.

22. (New) The cylinder of claim 21 wherein said cylinder base body and said cylinder outer body are unsupported by each other.

23. (New) The cylinder of claim 21 wherein said ratio is between 1:300 and 1:500.

24. (New) The cylinder of claim 21 wherein said gap has a gap clearance of between 2 to 5 mm.

25. (New) The cylinder of claim 15 further including a supply line and a removal line for said tempering medium.

26. (New) The cylinder of claim 21 further including a supply line and a removal line for said tempering medium.

27. (New) The cylinder of claim 25 further including at least one journal for supporting said cylinder, said supply line and said removal line being coaxially arranged in said journal.

28. (New) The cylinder of claim 26 further including at least one journal for supporting said cylinder, said supply line and said removal line being coaxially arranged in said journal.

29. (New) The cylinder of claim 15 wherein said cylinder is an inking roller.

30. (New) The cylinder of claim 21 wherein said cylinder is an inking roller.

31. (New) The cylinder of claim 15 wherein said cylinder is an screen roller.

32. (New) The cylinder of claim 21 wherein said cylinder is an screen roller.